

CLAIMS

What is claimed is:

- 1 1. An exchange system for settling accounts of users including buyers
2 and sellers of telecommunication services in a plurality of communications networks,
3 wherein the buyers and sellers input requests and offers using access stations
4 connected to a wide area network, said exchange system comprising:
5 an exchange server node connectable to the access stations of the buyers
6 and sellers through the wide area network for matching the sellers' offers and the
7 buyers' requests;
8 at least one switch node for routing telecommunications traffic between
9 the communications networks in response to matched offers and requests;
10 a database connected to said exchange server node and storing
11 information including account balances of the exchange system and each of the buyers
12 and sellers; and
13 a financial module connected to said exchange server node for processing
14 financial tasks.
- 1 2. The exchange system of claim 1, wherein said financial tasks
2 processed by said financial module include adjustment of the account balances of the
3 exchange system and each of the buyers and sellers stored in the database,
4 determination of the credit limit or risk premium for each of the buyers, and the netting
5 of the financial accounts of each of the buyers and sellers.
- 1 3. The exchange system of claim 1, further comprising a tracking
2 module for monitoring a buyer's usage of a matched seller's network and collecting
3 information regarding the buyer's usage.
- 1 4. The exchange system of claim 3, wherein the tracking module
2 forwards the collected information to the financial module and said database.

1 5. The exchange system of claim 3, wherein the collected information
2 includes call detail records.

1 6. The exchange system of claim 5, further comprising a batched-call
2 detail record processor and a billing processor, said batched-call detail record processor
3 receiving the call detail records from said exchange server node and arranging at least
4 some of the call detail records into a group which is processed as one transaction by
5 said billing processor.

1 7. The exchange system of claim 1, wherein said exchange server
2 node is connectable to a financial services node through the wide area network for
3 communicating the amount required to be paid by the buyer for a matched offer and
4 request and receiving an indication of a transfer of funds for that amount, said financial
5 module including means for adjusting the buyer's and seller's account balances
6 according to the indication received from the financial services node.

1 8. The exchange system of claim 1, wherein said financial module
2 includes an accounting module for determining net outstanding balances and amount
3 due to the buyers and sellers, coordinating payments between buyers and sellers, and
4 crediting and debiting the accounts of the buyers and sellers.

1 9. The exchange system of claim 1, wherein said exchange server
2 node is connectable to a financial services node, an external credit node, and an
3 external financial services organization through the wide area network, wherein said
4 financial module includes a financing decision module for receiving data from one of an
5 external credit node, an external financial services node, external financial services
6 organizations and said database and determining the credit and financial exposure of
7 each of the buyers and sellers.

1 10. The exchange system of claim 1, wherein said financial module
2 includes a credit module for scoring and rating the buyers' credit using information from

3 at least one of the financial services node, the external credit node, and said data
4 storage.

1 11. The exchange system of claim 10, wherein said database stores a
2 pre-approved credit limit of each of the buyers, and wherein said credit module performs
3 real-time monitoring of actual balance against the pre-approved credit limit of each of
4 the buyers.

1 12. The exchange system of claim 10, wherein said credit module
2 determines a pre-trading credit approval of a buyer using the scoring and rating of the
3 buyer's credit, said pre-trading credit approval indicating at least one of whether a buyer
4 can buy, the buyer's credit limit, and the amount of letter of credit or trading deposit
5 required.

1 13. The exchange system of claim 10, wherein said credit module
2 determines whether a user qualifies for a non-secured credit limit or an appropriate
3 amount of letter of credit, deposit, or bond.

1 14. The exchange system of claim 10, wherein said exchange server
2 node is connectable to a financial services node through the wide area network, and
3 wherein said credit module includes means for connecting to the financial services node
4 through the wide area network and requesting a letter of credit or credit authorization for
5 a user.

1 15. The exchange system of claim 10, wherein said exchange server
2 node is connectable to a financial services node through the wide area network, said
3 credit module comprising means for determining whether a buyer must post a trading
4 deposit prior to being authorized to trade and transmitting a request for a cash deposit
5 to the financial services node prior to authorizing trading rights to a buyer when it is
6 determined that the buyer must post a trading deposit.

1 16. The exchange system of claim 10, wherein said credit module
2 determines whether a user qualifies for a non-secured or non-collateralized credit limit.

1 17. The exchange system of claim 10, wherein said exchange server
2 node is connectable to a financial services node and an external credit node through the
3 wide area network, and wherein said credit module dynamically assesses and
4 reassesses credit scoring and financial exposure of a user in real time based on
5 information received from at least one of the external credit node, the financial services
6 node, and said database.

1 18. The exchange system of claim 10, wherein said exchange server
2 node is connectable to a financial services node and an external credit node through the
3 wide area network, and wherein said credit module collecting information from at least
4 one of the external credit node, the financial services node, and said database for
5 determining a risk premium for a user.

1 19. The exchange system of claim 9, wherein said exchange server is
2 connectable to a financial services node and an external credit node through the wide
3 area network, said financing decision module collecting information from at least one of
4 the financial services node, the external credit node, and said database for determining
5 applicable financing rates and terms for each of the users.

1 20. The exchange system of claim 3, wherein said tracking module
2 performs real-time collection of information from said at least one switch node, said
3 information related to each of the buyers' and sellers' usage, and sends the collected
4 information to said database.

1 21. The exchange system of claim 8, wherein said accounting module
2 nets each user's receivable against payable to determine the net amount owed or due in
3 real time and sends the net amount to the database, said exchange server node further

4 comprising a credit module for scoring and rating the buyers' credit using said amount
5 information from said database.

1 22. The exchange system of claim 8, wherein said exchange server
2 node is connectable to a financial services node through the wide area network,
3 wherein said accounting module performs automated bill settlement with sellers and
4 buyers by communicating with the financial services node.

1 23. The exchange system of claim 12, wherein the letter of credit or
2 cash deposit is held by the financial services node, wherein said financial module
3 includes an accounting module for determining net outstanding balances and amount
4 due to the buyers and sellers, coordinating payments between buyers and sellers, and
5 crediting and debiting the accounts of the buyers and sellers, and wherein said
6 accounting module automatically transmits to the financial services node a request to
7 transfer funds from the letter of credit or cash deposit for past due buyers.

1 24. The exchange system of claim 8, wherein said exchange server
2 node is connectable to a financial services node through the wide area network, and
3 wherein said exchange server node tracks amounts that are past due and notifies the
4 financial services node and other parties.

1 25. A method of using an online exchange system for settling accounts
2 of users including buyer and sellers of telecommunication services in a plurality of
3 communication networks, wherein the buyers and sellers input requests and offers
4 using access stations connected to a wide area network, the exchange system including
5 an exchange server node connectable to the access stations of the users through the
6 wide area network for matching the sellers' offer and the buyers' requests, said method
7 comprising:

8 storing account information of the exchange system and each of the
9 buyers and sellers in a database;

10 tracking, by a tracking module connected with the exchange server node,
11 information indicative of buyers' and sellers' usage of the telecommunication services in
12 real time; and

13 adjusting, by a financial module connected with the exchange server
14 node, the account balances of the exchange system and each of the users stored in the
15 database in real time based on the tracked information.

1 26. The method of claim 25, further comprising the step of monitoring,
2 by a credit module, users' credit in real time based on matched offers and requests and
3 the information indicative of the buyers' and sellers' usage.

1 27. The method of claim 26, further comprising the step of determining,
2 by the credit module, a pre-trading credit approval of a buyer using the monitored credit,
3 the pre-trading approval indicating at least one of whether a buyer can buy, the buyer's
4 credit limit, and the amount of letter of credit or trading deposit required.

1 28. The method of claim 26, said method comprising dynamically
2 assessing and reassessing, by the credit module, a credit score and financial exposure
3 of each of the users in real time based on information received from said database.

1 29. The method of claim 25, wherein the exchange system includes at
2 least one switch node for routing telecommunications traffic between communications
3 networks, said step of tracking comprising tracking, by the tracking module, information
4 from the at least one switch node indicative of the buyers' and sellers' usage.

1 30. The method of claim 25, wherein the exchange server node is
2 connectable to a financial services node by the wide area network, said method
3 comprising the steps of tracking amounts that are past due by user, determining
4 whether the user have letters of credit or cash deposits, and transmitting to the financial
5 services node a request for the transfer of funds from the letters of credit or cash
6 deposits.

1 31. The method of claim 26, wherein said exchange server is
2 connectable to a financial services node and an external credit node through the wide
3 area network, said method comprising dynamically assessing and reassessing, by the
4 credit module, a credit score and financial exposure of each of the users in real time
5 based on information received from at least one of the external credit node, the financial
6 services node, and said database.

1 32. The method of claim 25, wherein said step of tracking comprises
2 tracking call detail records, arranging or grouping at least some of the call detail records
3 into a group and processing the group of call detail records in a billing processor as a
4 single transaction.